DOCUMENT RESUME

ED 419 287 EA 029 048

AUTHOR Sorenson, Dean; Moore, Alan D.
TITLE Participation with the Superintendent in Decision Making: A Decade of Rhetoric or Reform?
PUB DATE 1998-03-00
NOTE 17p.; Paper prepared for the Annual Conference for the National Center for the Study of Small/Rural Schools (7th, Arlington, VA, March 26-28, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Administrative Organization; Administrator Behavior; Educational Trends; Elementary Secondary Education; Leadership Styles; *Participative Decision Making; *School Administration; *Superintendents; *Trend Analysis

ABSTRACT

For over a decade, numerous educators have espoused the need for increased participation in decision making. Yet, evidence shows that mechanisms intended to broaden access actually result in governance that is little different from traditional, more autocratic management methods. To better understand this phenomenon, an examination of the decentralization of authority and control in the school superintendency of teachers, parents, and students is offered. The paper compares the level of participation provided by school superintendents following a decade of rhetoric about the inclusion and sharing of governance. For the 1996 study, surveys were administered to 120 superintendents randomly selected from three northwestern states. The survey instrument described situations in six general topic categories: business; instruction; personnel relations; student relations; community relations; and noninstructional operations. The findings were compared to a similar survey performed in 1984. The comparison indicated that superintendents in both studies made similar judgments on the inclusion of others in decision making and did not significantly increase the level of participation of others in five of the six areas studied; business was the exception. Superintendents were selective about when they shared decision making, and their responses suggest that the level of participation has not risen over the past decade. (RJM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 419 287

Participation with the Superintendent in Decision Making: A Decade of Rhetoric or Reform?

Dean Sorenson, Ph.D.
Associate Professor
The University of Montana
Missoula, Montana

&

Alan D. Moore, Ph.D.
Associate Professor
University of Wyoming
Laramie, Wyoming

Paper presented to the 7th Annual National Conference on Creating the Quality School
March 26-28 1998
Arlington, Virginia

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
✓ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY
L.D. Sorenson
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

EA 029 048

Participation with the Superintendent in Decision Making: A Decade of Rhetoric or Reform?

Over the last two decades, school governance has changed to reflect, at least on the surface, a greater level of participation in decision making from a variety of quarters. School administrators have been urged to include subordinates and others in a variety of decisions previously considered to be within the exclusive domain of management. Terms and practices such as team management, strategic planning and site based management are pervasive in educational, normative literature and most encourage a type of decision making that builds consensus among stakeholders. Without judging the efficacy of participative decision making, this study focused on when and how school superintendents include others in decisions in light of the time available to make a decision and the decision topic.

Background

From the bureaucratic models of Weber to the human relations movement and Deming's Total Quality Management (TQM) schools have followed business' lead. Attempts to implement participatory management are legion. In most states, broadened participation in decision making is permitted and, several states, legislation has mandated the participation of teachers, parents and students in school decision making (Herman & Herman; 1993). These arrangements range from those with carefully prescribed processes to processes unencumbered by rules and are the result of significant shifts in political power. These shifts are reflected in collective bargaining demands, the prevalent and apparently growing criticism of public schools and a pervasive distrust of many forms of government. School systems have more than ever, become excellent examples of a social system in which the demands from the internal and external environments cannot be resisted. The management repertoire of a rational system, driven by top-down decision making, rules and regulations and compliant members, no longer work. Professional organizations representing school administrators and school boards have encouraged leaders to develop school improvement plans that provide for input from those outside the principal's and superintendent's office. Further, the inclusion of others in decision making is listed regularly among the qualifications desired by school boards in their search for new superintendents. The level of political discussion about schools and the expectation of access to school policy development have never been greater.

Purpose of the Study

After many years of discussion about increased participation in decision making, there seems to be evidence that the mechanisms intended to broaden access, actually result in governance that is little different from traditional, more autocratic management methods both at the building and central office levels. In the case of site-based management (SBM), the inclusion of teachers, parents and others in decision making has been described as an activity that does little to truly decentralize authority (Clune and White, 1988; Malen, Ogawa and Kranz, 1990; Wholstetter and Odden (1992). A study of several school districts caused Wholstetter and Odden (1992) to conclude that "...nothing has really been decentralized - SBM is everywhere and nowhere" (p. 531). Many times, these attempts to include teachers and others in decision making have been implemented without consideration for the change in role

among participants and the professional development that would better prepare them. This attempt to include those that may not be well prepared has caused conflict and confusion (Weiss, Cambone & Wyeth, 1992).

This study attempts to examine decentralization of authority and control, and compare the level of participation provided by school superintendents to others, after more than a decade of rhetoric about inclusion and sharing of governance. Data from an earlier study by Sorenson (1985) are compared to those of the current work.

Method

In 1996, 120 practicing superintendents were asked to complete a survey entitled the Situational Administrative Decision-making Inventory (SADI). Subjects were randomly selected from three northwestern states, from districts of more than 1,000-student enrollment, forty from each state. These responses were compared to another random sample of superintendents, from the same three northwestern states, with similar size districts, taken in 1984.

The survey instrument described situations in six general topic categories. Each category contained three simulations with short, medium or long decision-making time frames and each item described a realistic event. Respondents were asked to read the situation and then choose the decision-making process that most closely resembled one they would use to resolve each issue. The topic categories were (a) business, (b) instruction, (c) personnel relations, (d) student relations, (e) community relations, and (f) non-instructional operations. These categories were field tested by practicing administrators and found to be realistic and well within the normal purview of school administrators. These topics were also the same as those identified as typical by Peach (1978), Reise (1961), and Sorenson, Conners, Gmelch, Harder and Reed (1982).

The decision-making processes offered each respondent were adapted from Vroom and Yetton's (1973) group decision-making typology, each with scale values developed by the authors. The five decision-making processes range from independent decision making without consultation with others to consensual decision making in which the leader agrees to accept and implement a group's decision, without veto. The titles used in Table 1, Independent, Limited Independent, Advised Independent, Consultative and Consensual were substituted for the authors' original designations of AI, AII, CI, CII and GII respectively; descriptions of the processes were changed slightly but do not result in substantive or semantic differences.

Data Analysis

Scale scores from SADI were computed for all surveys completed by the superintendents. Means and standard deviations for the 1984 sample and 1996 sample, disaggregated by short, medium, and long decision-making time frame were computed. To test for statistical differences in means, a 2 x 3 split-plot ANOVA design was chosen (Kirk, 1982). Sample Year (1984 or 1996) was treated as a between-subjects factor, while Length of Time Frame (short, medium, or long) was treated as a within-subjects repeated measures factor. An analysis of variance was conducted for each of the six topic categories. In each case, three hypotheses were tested. First, the test of interaction between sample year and length of time frame answered the question, "do the patterns among means for length of time frame differ by

sample year"? If this first test was nonsignificant, the test of the two main effects could be interpreted unambiguously. The test of the main effect for Sample Year told us whether there were differences in overall means between 1984 and 1996. The test of the second main effect, Length of Time Frame, indicated whether superintendents used a more or less participatory decision-making style for short, medium, and long time frame decisions. Tukey HSD post-hoc tests ($\alpha = .05$) were conducted for this second factor.

Presentation and Discussion of Findings

In all cases, there was no significant interaction between Sample Year and Length of Time Frame. This indicated that the patterns among means across short, medium, and long time frames within each of the six topic categories were the same in 1996 as they were in 1984. This primary result shows that the 1996 sample of superintendents were using essentially the same decision-making style in each of the six topic areas as the 1984 sample, though the level of participation may have increased or decreased without regard to length of time frame. In the following presentation of findings, we will discuss the results for each of the six topic categories and then summarize.

Business

The means of scores for the Business category of scenarios are displayed in Table 2; the corresponding ANOVA is displayed in Table 3. The test of interaction was nonsignificant ($F = 0.31$, $p = .731$). The overall means across all length of time frames were 7.69 for 1984 and 8.42 for 1996. The difference of 0.73 was statistically significant ($F = 11.06$, $p = .001$). Superintendents in the 1996 sample were somewhat more participatory in their decision-making in scenarios related to Business activities. The average scale values across Length of Time Frame for the combined samples were 6.83 for Short, 8.67 for Medium, and 8.55 for long. The differences among these means were statistically significant ($F = 50.26$, $p < .001$). The short time frame scenarios were rated less participatory than the average of medium and long, the difference being on the order of 8.60 - 6.83 = 1.77.

Instruction

The means of scores for the Instruction category of scenarios are displayed in Table 4; the corresponding ANOVA is displayed in Table 5. The test of interaction was nonsignificant ($F = 1.26$, $p = .286$). The overall means across all length of time frames were 8.38 for 1984 and 8.45 for 1996. The difference of 0.07 was not statistically significant ($F = 0.04$, $p = .833$) Superintendents in the 1996 sample were no more participatory in their decision-making in scenarios related to Instruction than were those in 1984. The average scale values across Length of Time Frame for the combined samples were 8.26 for Short, 7.92 for Medium, and 9.06 for long. The differences among these means were statistically significant ($F = 15.56$, $p < .001$). The long time frame scenarios were rated more participatory than the average of short and medium, the difference being on the order of 9.06 - 8.09 = 0.97.

Personnel Relations

The means of scores for the Personnel Relations category of scenarios are displayed in Table 6; the corresponding ANOVA is displayed in Table 7. The test of interaction was nonsignificant ($F = 0.53$, $p = .590$). The overall means across all length of time frames were

6.43 for 1984 and 6.68 for 1996. The difference of 0.25 was not statistically significant ($F = 0.42$, $p = .520$). Superintendents in the 1996 sample were no more participatory in their decision-making in scenarios related to Personnel Relations than those in 1984. The average scale values across Length of Time Frame for the combined samples were 6.25 for Short, 5.86 for Medium, and 7.52 for long. The differences among these means were statistically significant ($F = 23.02$, $p < .001$). The long time frame scenarios were rated more participatory than the average of short and medium, the difference being on the order of 7.52 - 6.06 = 1.46.

Student Relations

The means of scores for the Student Relations category of scenarios are displayed in Table 8; the corresponding ANOVA is displayed in Table 9. The test of interaction was nonsignificant ($F = 0.14$, $p = .866$). The overall means across all length of time frames were 7.27 for 1984 and 7.70 for 1996. The difference of 0.53 was not statistically significant ($F = 2.56$, $p = .111$). Superintendents in the 1996 sample were no more participatory in their decision-making in scenarios related to Student Relations than those in 1984. The average scale values across Length of Time Frame for the combined samples were 4.66 for Short, 8.77 for Medium, and 8.90 for long. The differences among these means were statistically significant ($F = 210.65$, $p < .001$). The long and medium time frame scenarios were rated much more participatory than the short scenarios, the difference being on the order of 8.84 - 4.66 = 4.18.

Community Relations

The means of scores for the Community Relations category of scenarios are displayed in Table 10; the corresponding ANOVA is displayed in Table 11. The test of interaction was nonsignificant ($F = 0.37$, $p = .694$). The overall means across all length of time frames were 6.05 for 1984 and 6.02 for 1996. The difference of 0.03 was not statistically significant ($F = 0.00$, $p = .959$). Superintendents in the 1996 sample were no more participatory in their decision-making in scenarios related to Community Relations than those in 1984. The average scale values across Length of Time Frame for the combined samples were 3.58 for Short, 5.76 for Medium, and 8.78 for long. The differences among these means were statistically significant ($F = 148.43$, $p < .001$) The longer the time frame for a community relations decision, the more participatory were the superintendents in both 1984 and 1996.

Non-instructional Operations

The means of scores for the Non-instructional Operations category of scenarios are displayed in Table 12; the corresponding ANOVA is displayed in Table 13. The test of interaction was nonsignificant ($F = 0.98$, $p = .376$). The overall means across all length of time frames were 7.52 for 1984 and 7.40 for 1996. The difference of 0.12 was not statistically significant ($F = 0.13$, $p = .718$). Superintendents in the 1996 sample were no more participatory in their decision-making in scenarios related to Non-instructional Operations than those in 1984. The average scale values across Length of Time Frame for the combined samples were 7.10 for Short, 7.78 for Medium, and 7.55 for long. The differences among these means were statistically significant ($F = 5.25$, $p = .006$). The short time frame scenarios were rated less participatory than the long time frame scenarios, but neither mean was significantly different from that for medium time frame scenarios. The difference between short and long was 0.68.

In summary, the pattern of participation in making decisions in short, medium and long time frames for the six topic categories remained the same in 1996 as it was in 1984. In only

one case, for business-related scenarios, was there an increase in overall level of participation reported by superintendents. However, even this increase of 0.73 on the SADI was modest, considering that the range of scores possible was 10 points. In all six scenario topic categories, the longer the time frame, the more participatory were the superintendents. The greatest variation in participation level was seen in scenarios of Student Relations and Community Relations, where the ranges from lowest degree of participation to highest were 4.18 and 4.28, respectively. The variation in degree of participation in the other four categories was markedly smaller, ranging from a difference of 0.68 for Non-instructional Operations to 1.77 for business-related scenarios. In these cases, though the degree of participation increased for scenarios with longer time frames, this increase was not significantly larger in the 1996 sample.

Conclusions

The data indicate that, although in both the 1984 and 1996 samples, superintendents made similar judgments as to when and how to include others in decision making, they did not significantly increased the level of participation of others, with one exception. The level of participation provided in the three business scenarios was higher. These three scenarios dealt with an emergency revision of a draft budget, setting the level of a local tax levy and long-range planning for predicted reductions in state support for the following year. Increased access to participation on fiscal decisions may reflect a need to accommodate the input of factions in the school community competing for scarce resources. Concomitant developments for school leaders dealing with declining resources can include reduction of staff and programs, or school closure. The topic of financial planning, the heartblood of the district, may generate inclusion to diminish conflict. Malen (1994), in describing decentralized decision making as a conflict manager, stated that the structure inclusion provides "[a] special form of support rooted in reservoirs of favorable dispositions regarding the 'rightness' of action-and accumulate symbolic reserves to diminish or deflect criticism" (p. 250).

The release of control in decision making contains inherent risks for superintendents. Ultimately held accountable by school boards for district performance, the superintendent may choose to share decision making on some sensitive issues out of the need for survival. Public school superintendents operate within a social and organizational environment quite different than that of a few decades ago. Superintendents must balance the interest of others in decision making with the maintenance of organizational equilibrium. Decision topic and the time to decide are critical in choosing a decision making process that will sustain the superintendent's credibility with others and engender longevity. Certainly, superintendents who elicit input from others but ignore group opinion in making their decision would be open to criticism for providing token participation. On the other hand, stakeholders don't want to be involved in every decision due to their interest, expertise and available time. The skill of knowing when to include others in decision making must play an important role in superintendent success.

Glass (1992) found that the average tenure for school superintendents was 6.5 years but superintendents in very small and very large districts was even less. Giles and Giles (1990) reported that 25% of school superintendents in California held their jobs for 2 years or less. The "rightness" of a decision, as evaluated by any number of special interest groups, is correlated with both incumbent board member defeat and non-renewal of superintendent's contract (Lutz & Merz, 1992).

Locus of Superintendent Decision Making: Individual Versus Group Consultation

Although normative literature portrays formal administrative (cabinet) meetings as the locus of decision making, studies seems to indicate otherwise. Tucker and Zeigler (1980) studied eleven school districts and in nearly half, the expectation of administrators that discussions at administrative cabinet meetings would result in a decision was low. In one district, of 360 discussion items, only 13% were intended to end in a decision and in only 82% of those was that expectation achieved (approximately 10% of the total). They found that, "Cabinet meetings are not mainly forums of decision-making; their nature is more one of collegial exchange of information (p. 174)." Administrative meetings serve important functions such as the development and maintenance of organizational unity, professional support and socialization.

The finding that most decisions are made outside formal administrative meetings was also corroborated by a study of two Washington State school districts, said to be practicing "team management," an early participatory decision making model, designed to make school board members and all administrators, part of the same team. This structure, by definition, relied on collaborative decision making. In both districts studied, administrators did not see administrative cabinet meetings as the locus of decisions. In one district, although the formal meeting agenda for administrative meetings were divided into sections for announcements and discussion, discussion items were actually announcements providing for little input from other than central office administration. One administrator remarked "...we don't make decisions at those meetings. When a decision is necessary, he [the superintendent] calls me on the phone, or I go see the person required to get it done" (Sorenson, Conners, Gmelch, Harder & Reed 1982, p. 18). With some caution, mean scores from the current study can be used to infer that many decisions are made outside of formal meetings.

Another example of how decisions occur outside formal meetings was described by Pitner and Ogawa (1981). The authors found that superintendents were engaged 82% of the time with dyadic contacts with individuals within the organization exerting influence as a key communicator. "... it would be inefficient to involve disinterested parties and ineffective to put off transmission [of information] until a scheduled meeting could be called." (Pitner & Ogawa, 1981, p. 55).

Many public school superintendents regularly, deliberately or intuitively assess situational, environmental and organizational variables such as the time available to decide and the political complexity of decision topics in order to determine when the involvement of others in decision making is indicated. The provision of opportunities for others to participate in decision making varies not only among leaders but also among situations.

The time available to decide impacts the decision-making process selected by superintendents and, with few exceptions, the greater the time to decide the more participative the process selected. Superintendents also consider decision topics carefully before determining the process by which decisions will be made. Current interest in consensual decision processes notwithstanding, successful school superintendents are most likely those, adept at discriminating among situations in which outside participation is essential in maintaining organizational stability, public confidence and personal credibility and those in which a more autocratic process is more efficient and tolerated or expected by others.

However, with the exception of one topic category, superintendent responses, from two samples taken a dozen years apart, indicate that the level of participation has not changed. The

long-standing rhetoric about expanded opportunities for inclusion in decision making does not seem to be reflected in the data.

References

Clune, W.H. & White, P.A. (1988). School-based management: Institutional variation, implementation and issues for further research. New Brunswick, NJ: Eagleton Institute of Politics, Center for Policy Research in Education.

Giles. S. & Giles D.E. (1990). Superintendent turnover: Crisis facing American schools. (Report No. EA 022 484). California. (ERIC Document Reproduction Services No. ED 325 981.

Glass, T.E. (1992). The 1992 study of the American school superintendency: American's education leaders in a time of reform. Arlington, VA: American Association of School Administrators.

Herman, J.J. & Herman, J.L. (1993). School-based management: Current thinking and practice. Springfield, Ill.: Charles C. Thomas Publisher.

Kirk, Roger E. (1982). Experimental Design: Procedures for the Behavioral Sciences, (2nd Ed). Belmont, CA: Wadsworth Inc.

Lutz, F.W. & Merz, C. (1992). The politics of school community relations. New York: Teachers College Press.

Malen, B. (1994). Enacting site-based management: A political utilities analysis. Educational Evaluation and Policy Analysis. 16, (3), pp. 249-267.

Malen, B., Ogawa, R. & Kranz, J. (1990). What do we know about school-based management? A case study of the literature - A call for research. In W.H. Clune & J.F. Witte (Eds). Choice and control in American education (Vol. 2, pp. 289-342). Philadelphia: Falmer.

Peach, L.E. (1978). Perceptions of participation in decision making and satisfaction with decisions made in the Knox County School System. (Doctoral Dissertation, University of Tennessee. Dissertation Abstracts International, 1979, 39, 4635A-4636A, University Microfilms No. 7903461.

Pitner, N.J. & Ogawa, R.T. (1981). Organizational leadership: The case of the school superintendent. Educational Administration Quarterly, 17, (2), 45-65.

Riese, H. (1961). Role expectations of the superintendent as viewed by school board members. The Research Record. March/April, 8, (3), 1-26.

Sorenson, L.D., Conners, D.A., Gmelch, W.H., Harder, R.B. and Reed, D.B. (1982). Team management in public school districts: Structure, process and function. Paper presented

to the American Educational Research Association, annual meeting, New York City, March, 1982.

Sorenson, L.D. (1985). Decision making of public school superintendents: The involvement of subordinates and others. Paper presented to the American Educational Research Association, Chicago.

Tucker, H.J. & Seigler, L.H. (1980). Professional versus the public: Attitudes, communication and response in school districts. New York: Longman Press.

Vroom, V.J. and Yetton, P.W. (1973). Leadership and decision-making. Pittsburgh: University of Pittsburgh Press.

Weiss, C.H., Cambone, J. & Wyeth, A. (1992). Trouble in paradise: Teacher conflicts in shared decision making. Educational Administration Quarterly. 28, (3), 350-367.

Wholstetter, P. & Odden, A. (1992). Rethinking school-based management policy and research. Educational Administration Quarterly. 28, (4), 529-549.

Table 1
Vroom and Yetton Decision Making Processes Typology and Scale Values

Process Type	Description	Scale Value
Process #1 - Independent (AI)	You solve the problem(s) with the information available to you at the time.	0.00
Process #2 - Limited Independent (AII)	You obtain the necessary information from your subordinates, then you decide the solution to the problem(s). Subordinates provide information but do not evaluate or generate alternatives.	0.63
Process #3 - Advised Independent (CI)	You share the problem(s) with relevant subordinates or others individually, getting their ideas/suggestions, without bringing them together as a group. Your decision may or may not reflect their input.	5.00
Process #4 - Limited Consensual (CII)	You share the problem(s) with a group of subordinates or others, obtaining their collective ideas/suggestions. You make a decision that may or may not reflect group input.	8.13
Process #5 - Consensual (GII)	You share the problem(s) with a group of subordinates or others. Together you generate and evaluate alternatives attempting to reach consensus. You are willing to accept and implement any solution supported by the group.	10.00

Note. Adapted from Vroom and Yetton (1973). Leadership and decision-making. Pittsburgh: University of Pittsburgh Press.

Table 2
Means and Standard Deviations for Business Scenarios by Year and Length of Time Frame

Year		Length of Time Frame Short	Medium	Long	Total
	(SD)	(2.84)	(1.91)	(1.74)	
	n	89	88	89	
1996	Mean	7.34	9.04	8.89	8.42
	(SD)	(2.57)	(1.25)	(0.92)	
	n	71	70	71	
Total	Mean	6.83	8.67	8.55	

Table 3
Analysis of Variance of Business Scenarios by Sample Year and Length of Time Frame

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between					
YEAR	1	62.50	62.50	11.06	0.0011
Within					
LENGTH	2	329.71	164.86	50.26	0.0001
LENGTH*YEAR	2	2.06	1.03	0.31	0.7309
SUBJ(YEAR)	158	892.70	5.65	1.72	0.0001
Error	314	1029.96	3.28		
Total	477	2327.02			

Table 4
Means and Standard Deviations for Instructional Scenarios by Year and Length of Time Frame

Year		Length of Time Frame Short	Medium	Long	Total
1984	Mean	8.39	7.86	8.91	8.38
	(SD)	(1.63)	(2.57)	(1.53)	
	n	89	89	88	
1996	Mean	8.10	7.99	9.25	8.45
	(SD)	(2.60)	(2.80)	(1.14)	
	n	70	70	71	
Total	Mean	8.26	7.92	9.06	

Table 5
Analysis of Variance of Instructional Scenarios by Sample Year and Length of Time Frame

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between					
YEAR	1	0.28	0.28	0.04	0.8331
Within					
LENGTH	2	112.50	56.25	15.56	0.0001
LENGTH*YEAR	2	9.08	4.54	1.26	0.2864
SUBJ(YEAR)	158	987.18	6.25	1.73	0.0001
Error	313	1131.46	3.61		
Total	476	2236.75			

Table 6
Means and Standard Deviations for Personnel Relations Scenarios by Year and Length of Time Frame

Year		Length of Time Frame: Short	Medium	Long	Total
1984	Mean	6.15	5.83	7.30	6.43
	(SD)	(3.49)	(3.39)	(2.78)	
	n	89	88	88	
1996	Mean	6.37	5.88	7.79	6.68
	(SD)	(3.45)	(3.39)	(2.69)	
	n	70	71	71	
Total	Mean	6.25	5.86	7.52	

Table 7
Analysis of Variance of Personnel Relations Scenarios by Sample Year and Length of Time Frame

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between					
YEAR	1	8.68	8.68	0.42	0.5197
Within					
LENGTH	2	232.40	116.20	23.02	0.0001
LENGTH*YEAR	2	5.33	2.66	0.53	0.5904
SUBJ(YEAR)	158	3293.28	20.84	4.13	0.0001
Error	313	1580.10	5.05		
Total	476	5126.13			

Table 8
Means and Standard Deviations for Student Relations Scenarios by Year and Length of Time Frame

Year		Length of Time Frame Short	Medium	Long	Total
1984	Mean	4.53	8.57	8.67	7.27
	(SD)	(3.54)	(1.66)	(1.34)	
	n	88	89	89	
1996	Mean	4.82	9.02	9.19	7.70
	(SD)	(3.50)	(1.53)	(1.04)	
	n	69	71	71	
Total	Mean	4.66	8.77	8.90	

Table 9
Analysis of Variance of Student Relations Scenarios by Sample Year and Length of Time Frame

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between					
YEAR	1	19.83	19.83	2.56	0.1114
Within					
LENGTH	2	1802.51	901.25	210.65	0.0001
LENGTH*YEAR	2	1.24	0.62	0.14	0.8655
SUBJ(YEAR)	158	1222.46	7.74	1.81	0.0001
Error	313	1339.12	4.28		
Total	476	4421.79			

Table 10
Means and Standard Deviations for Community Relations Scenarios by Year and Length of Time Frame

Year		Length of Time Frame Short	Medium	Long	Total
1984	Mean	3.72	5.70	8.74	6.05
	(SD)	(3.42)	(3.71)	(1.07)	
	n	89	81	88	
1996	Mean	3.40	5.84	8.82	6.02
	(SD)	(3.36)	(3.60)	(1.02)	
	n	71	69	71	
Total	Mean	3.58	5.76	8.78	

Table 11
Analysis of Variance of Community Relations Scenarios by Sample Year and Length of Time Frame

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between					
YEAR	1	0.03	0.03	0.00	0.9592
Within					
LENGTH	2	2154.59	1077.30	148.43	0.0001
LENGTH*YEAR	2	5.32	2.66	0.37	0.6937
SUBJ(YEAR)	158	1760.70	11.14	1.54	0.0008
Error	305	2213.71	7.26		
Total	468	6152.62			

Table 12
Means and Standard Deviations for Non-instructional Operations Scenarios by Year and Length of Time Frame

Year		Length of Time Frame Short	Medium	Long	Total
1984	Mean	7.28	7.77	7.50	7.52
	(SD)	(2.96)	(2.00)	(2.30)	
	n	89	89	88	
1996	Mean	6.80	7.80	7.61	7.40
	(SD)	(3.11)	(2.11)	(2.78)	
	n	71	71	71	
Total	Mean	7.10	7.78	7.55	

Table 13
Analysis of Variance of Non-instructional Operations Scenarios by Sample Year and Length of Time Frame

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Between					
YEAR	1	1.44	1.44	0.13	0.7181
Within					
LENGTH	2	45.59	22.79	5.25	0.0057
LENGTH*YEAR	2	8.54	4.27	0.98	0.3754
SUBJ(YEAR)	158	1743.86	11.04	2.54	0.0001
Error	315	1368.48	4.34		
Total	478	3164.65			